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ABSTRACT OF THE DISCLOSURE

An arrangement, method, and system for personalizing published software according to the specific authorized user, and thereby offering protection against unauthorized copying and distribution by discouraging the authorized user from indiscriminately making and distributing unauthorized copies. The personalization is incorporated into the software build and is delivered to the authorized user with embedded pre-existing personal information, without requiring the user to input this information during setup or installation. Because the personal information has already been pre-incorporated into the deliverable published software upon receipt by the authorized user and does not require any manual entry by the user, it is feasible to employ strong cryptography using complex keys for authentication and other protective purposes. Moreover, because each delivery to an authorized user results from an individually-personalized software build, the executable modules of each distributed authorized copy of the software will have a unique binary form that can be made to vary significantly, including variations in the size of the executable module, while still having completely identical user functionality. This variation provides further protection to the software by eliminating the constant program address locations that are easy to analyze and attack with automated protection-disabling programs. Also disclosed are novel methods of utilizing an embedded strong personalization in Java applications and applets in combination with the use of signed Java archive files to afford additional protection to the software. Software protected according to the present invention may be distributed on physical media as well as via networks, but the invention is particularly well-suited to protecting software distributed via networks, such as the Internet, where prior-art protective measures are weak, clumsy, vulnerable to attack, or inapplicable.